Amendments to the Specifications:

Please replace the paragraph beginning on page 3, line 17, with the following corrected paragraph:

Central controller is a[[s]] core element of this electro-mechanical vehicle scheme, and distributes and manages electricity preferably in a 42-volt system. The controller serves as a multimedia center for the user to control both electronic and mechanical segments of the vehicle through a gateway. Its main task is to control the user interaction with the system and serve as a front-end for many electronic control units. These units include telematic components in the vehicle such as wireless internet, digital video broadcast entertainment, digital audio broadcast, digital multimedia broadcast, global positioning system navigation, safety services, intelligent transportation systems, and universal mobile telecommunications system.

Please replace the paragraph beginning on page 12, line 12, with the following corrected paragraph:

The powertrain (502) branch allows user control with the transmission, the driveline, traction motor (204), throttle actuation, steering, active suspension and ride height adjustment. Optionally, the body/powertrain control system (104) can allow the user to control the transmission directly, such as for manual transmissions, depending on driver preference. Security systems (503) include applications including voice recognition, solid-state finger print scanners, theft alerts, and door lock sensors. The security system (503) can also alert the user of malfunctions within the vehicle (100) systems. For example, the

security system can detect a failed LED in sensors that compromise vehicle safety or security. For instance, a comparator senses the voltage at the LED anode. When the LED is on, the voltage drop is approximately 1.2 volts, and the comparator output is high. If the LED opens, the voltage at the anode will rise to above 3 volts. In this instance, the LED is operating constantly. For switched LED that may occasionally be turned off, the voltage drop across the switching transistor is considered with the reference voltage, and the software (302) ignores the comparator output when the LED is turned off.

Please replace the paragraph beginning on page 22, line 3, with the following corrected paragraph:

When the user activates ignition, the software (302) opens the fuel storage tank (211) and the air intake system (209) and channels the fuel through the fuel system (210) and oxygen through the air intake system to the fuel cell stack (200). The software (302) can determine the amount of fuel required for ignition and operation in selective terrains. For example, these can be either pre-set conditions programmed in the software (302) or the user can program the software (302) to feed more or less fuel to the fuel cell stack depending on the desired terrain, increasing vehicle performance and safety. The software (302) can also detect leaks in [[the]] either the fuel system (210), the air intake system (209), or the fuel storage tank (211) using optical and magnetic sensors, and alert the user on the LCD terminal (615). Optionally, an audio message can alert the user while in the vehicle (100). Alternatively, if leaks are detected by the sensors, the software (302) closes the fuel storage tank (211) to stop fuel flow and command the vehicle to use electricity from the lithium-ion battery (203). This increases safety by reducing the amount of volatile

fuel leaked to potentially hazardous locations in the vehicle (100). Safety is also increased by the lithium–ion battery (203) serving as an auxiliary source of power for the vehicle when it cannot rely on fuel for electricity.

Please replace the paragraph beginning on page 25, line 6, with the following corrected paragraph:

Software (302) controlled cruise control works in conjunction with radar sensors (606) and camera systems (607) to provide the user with an active cruise control that detects the acceleration or deceleration of a traveling vehicle ahead of the user's vehicle (100). As the lead vehicle accelerates or decelerates, the software commands the user's vehicle to accelerate or decelerate with the same magnitude. This increases safety for the user by allowing a constant buffer between the user's vehicle and the lead vehicle. Additionally, software (302) can assist the user with vehicle operation in the same manner by provid[[e]]ing the user with lane departure warnings, blind-spot detection, pre-crash sensing, and active cruise control, parking slot measurement, and radar parking and reversing aid.

Please replace the paragraph beginning on page 27, line 15, with the following corrected paragraph:

Audio DSP system (608) software enables the user to create and use voice-activated commands of telematic functions in the telematic system (103). This software can be used in conjunction with the touch screen software on LCD terminals (615). For example, the

software can allow the user to navigate a touch screen menu in which the icon functions and responds to voice activated commands at the same time.

Please replace the paragraph beginning on page 28, line 7, with the following corrected paragraph:

For example, a failed LED in a senor (205) can cause the system to operate in an unsafe manner. For instance, a safety lid [[that]] remains open during machine operation. A remedy for failed LED in the sensor (205) includes two sensors for the lid, one that's blocked when the lid is open and one that's blocked when the lid is closed. For operational functionality, both sensors (205) must be in the correct (lid closed) position.